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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,934	04/06/2001	Keiji Okinaka	35.C15292	3603
5514	7590	11/08/2004	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			GRANT II, JEROME	
30 ROCKEFELLER PLAZA			ART UNIT	
NEW YORK, NY 10112			PAPER NUMBER	

2626

DATE MAILED: 11/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/826,934

Applicant(s)

OKINAKA ET AL.

Examiner

Jerome Grant II

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

JEROME GRANT II  
PRIMARY EXAMINER

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### **Detailed Action**

#### **Rejections Under Section 112**

1.

Claims 1-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a)

In claims 1 and 10, line 10, the claim refers to the number of dots. However, no specific number of dots have been previously specified in the claim.

b)

Claims 1 and 10 are unclear in that they recite the number of dots is equal in all gray levels in each of the blocks. There are 256 possible gray levels, does applicant really intend that in each box is an identical number of dots for all gray levels from 0-255 ?

c)

The third limitations in claims 1, 10, 22, 23, regarding the dot patterns states that "the dot patterns.. are mutually the same. However, only one dot patterns was previously mentioned. Applicant has never before mentioned other than one dot pattern. Hence, the claim is confusing and there is no antecedent for plural patterns.

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d)

The last limitation in claims 1 and 10 refer to "the dots are increased while taking conformity of the dot patterns." It is not clear how the dots are increasing. Are they increasing according to size or are they increasing according to density? It's unclear. Furthermore, the taking conformity is also unclear. Conforming to what? Does applicant contend that the dot will be apart of a dot pattern or will it increase to the size of the pattern?

e)

With respect to claim 3, 18, 24 and 25, these claims refer to "the dot patterns made mutually the same and the other blocks." This limitation is incomplete or idiosyncratic and cannot be understood. What other blocks are being discussed.

f)

Claims 4 refers to dot patterns being "preferential". Preferred with respect to what? Dots increasing? How?

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2. Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The limitation which states the dot patterns in the plural blocks are made mutually the same in all the gray levels does not have support in the written specification. Correction is required.

The specification does not recite with clarity what the repulsion potential is in conjunction with its relation to taking conformity of dot patterns.

Claims 2, 5, and 12 refer to "repulsion potentials" having to do with the conformity of dot patterns. It is not clear what this is ? Does it refer to error diffusion ? Is the error in the pattern what makes it not conform to the desired pattern ?

3. **Pursuant to MPEP 702.01 the following rejection is made:**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin.

Claims 1-25 are rejected over Lin 6, 633, 412.

Lin is also directed toward a gray level reproduction method using a threshold matrix shown by figure 5. Lin also teaches a threshold matrix 52 shown by figure 4, including dots having predetermined values also shown by figure 4. Lin shows a boundary of blocks shown in figure 4. Lin teaches a matrix for repeatedly being used in the two-dimensionally directions and being periodical in a vertical and diagonal direction

The threshold matrix could be a rectangle as shown by figures 9 and 10, which is other than a square.

See the Background of the Invention of Lin, at col. 1, lines 45-50. See also col. 5, lines 14-25 of Lin regarding decomposed plural color components, R, G and B and print colors C, M, Y and K.

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4.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerome Grant II whose telephone number is 703-305-4391. The examiner can normally be reached on Mon.-Fri. from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A Williams, can be reached on 703-305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J. Grant II

JEROME GRANT II  
PRIMARY EXAMINER